

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-029788**Date Inspected:** 05-Jun-2013**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** As noted below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

Quality Assurance Inspector (QA) Douglas Frey was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

This QA Inspector randomly observed ABF welder Guo Wu Chen #1556 perform the Shielded Metal Arc Welding (SMAW) process in the 3G position on the Hinge "A" barricade joint. The welder was observed utilizing WPS ABF-D1.5-F1200A-Revision 2. The welder was observed preheating the surface area prior to welding and other welding parameters as inspected by the QC Inspector were recorded as 138 amperes and appeared to be in compliance with the WPS noted above. The QAI noted that no drawings or details were available and inquired of ABF Engineer Bill Sullivan who stated that details would be provided.

This QA Inspector performed a Deck survey of the surface condition of the deck surface of the east bound Skyway at locations Bench Mark 1703 to Bench Mark 1750. This inspection was conducted in conjunction with Smith Emery Quality Control personnel and impact sites as well as arc strikes and any irregularities was measured for depth and length as well as location and recorded for a repair procedure.

This QA Inspector randomly observed ABF welding personnel perform repair operations on deck survey indications at the following locations;

#1 – Bench Mark 1703-1160mm E5-2260mm / grind and MPT

#2 – Bench Mark 1703+0mm E5-2550mm / grind and MPT

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

- #3 – Bench Mark 1703+0mm E3+2140mm / grind and MPT
- #4 – Bench Mark 1709-450mm E4+0mm / grind and MPT
- #5 – Bench Mark 1715+1750mm E4-550mm / grind and MPT

This QA Inspector randomly observed Quality Control Inspector Fred Michels perform Magnetic Particle (MPT) testing and inspection of the deck survey indications listed above. QC was performing the testing in accordance with AWS D1.5-Section 6.7.6-2002 and ASTM E709. It was noted that no rejectable indications were found and appeared to comply with the contract specifications.

This QA Inspector reported to Crossbeam CB8 to observe and monitor the progress of repair operations. It was noted that four (4) ABF/JV welding personnel were operating magnetic base drills and had completed 250 holes at the time of the observation. ABF-SUB-002845R00 was referenced during this observation and the work is in progress.

This QA Inspector randomly observed ABF welder Wai Kit Lai #2953 perform the SMAW process in the 4G overhead position on the shear key anchorage lugs at E2. The welder was observed utilizing WPS ABF-D1.5-F1200A Rev. 2 for Fillet welding. The welder was observed preheating the surface area prior to welding and other welding parameters as inspected by the QC Inspector were recorded as 136 amperes and appeared to be in compliance with the WPS noted above. The QA Inspector made subsequent observations throughout the shift to monitor quality and noted that the work was in progress and appeared to be in general conformance with the contract documents. RFI-003331R00 was referenced during this observation.

This QA observed QC Inspector William Sherwood and Fred Michels performing welding parameter checks such as voltage, amps, electrodes and preheats throughout the day. Non-Destructive Testing methods utilized by the QC Inspectors were Visual Testing (VT), Magnetic Particle Testing (MPT). QC Inspectors were observed performing inspection per applicable code and or contract criteria. Unless otherwise noted, all work observed on this date appeared to generally comply with the contract documents.

Summary of Conversations:

Conversations on this date were relevant to work performed.



Comments

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Gary Thomas 916-764-6027 , who represents the Office of Structural Materials for your project.

Inspected By:	Frey,Doug	Quality Assurance Inspector
Reviewed By:	Reyes,Danny	QA Reviewer
